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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/727,597 | 12/05/2003 | Ta-Yuan Lee | LEE0027-US | 7505 |

7590 04/04/2005
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| EXAMINER |
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HAN, JASON

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| ART UNIT | PAPER NUMBER |
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2875

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,597

Applicant(s)

LEE, TA-YUAN

Examiner

Jason M. Han

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 2: (212). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:
 - a. Page 2, Paragraph 5, Line 5: Grammatical error – "light sourc";
 - b. Page 4, Paragraph 14, Line 3: Typographical error – "first light-guiding structure 340, a second light-guiding structure 340";

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- c. Page 4, Paragraph 14, Line 5: Typographical error – “second cap 324” should read as “second cap 320”;

Appropriate correction is required.

Claim Objections

4. Claims 1, 5, 9, and 13 are objected to because of the following informalities:
Grammatical errors in the last limitation – “brighter” should read as “brighten”.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone (U.S. Patent 4012632).
6. With regards to Claim 1, Stone discloses an illumination/input device including:
- A first light source [Figure 2: (24)] emitting a first light of a first color [Column 3, Lines 31-35];
 - A second light source [Figure 2: (32)] emitting a second light of a second color [Column 3, Lines 53-58];
 - A cap [Figure 2: (16)] having a first portion [Figure 2: (26)] and a second portion [Figure 2: (28, 30)], the first portion displaying brightness by the first light, the second portion displaying brightness by the second light; and

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- A control module [Figure 3; Column 4, Lines 16-28] controlling the first light source and the second light source;
 - Wherein the illumination/input device is in a first state, the control module controls the first light source to emit the first light to brighten the first portion, and as the illumination/input device is in a second state, the control module controls the second light source to emit the second light to brighten the second portion [Column 3, Lines 63-68].
6. With regards to Claim 2, Stone discloses the first portion [Figure 2: (26)] including a first filter corresponding to the first color [Column 3, Lines 29-33], and the second portion [Figure 2: (28, 30)] including a second filter [Figure 2: (30)] correspond to the second color [Column 3, Lines 53-56].
7. Claims 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone (U.S. Patent 4012632).
8. With regards to Claim 5, Stone discloses an illumination/input device including:
- A first light source [Figure 2: (24)] emitting a first light of a first color [Column 3, Lines 31-35];
 - A second light source [Figure 2: (32)] emitting a second light of a second color [Column 3, Lines 53-58];
 - A cap [Figure 2: (16)] having a first portion [Figure 2: (26)] and a second portion [Figure 2: (28, 30)], the first portion displaying brightness by the first light, the second portion displaying brightness by the second light; and

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- A control module [Figure 3; Column 4, Lines 16-28] controlling the first light source and the second light source;
 - Wherein the illumination/input device is in a first state, the control module controls the first light source to emit the first light to brighten the first portion, and as the illumination/input device is in a second state, the control module controls the second light source to emit the second light to brighten the second portion [Column 3, Lines 63-68].
9. With regards to Claim 6, Stone discloses the first portion [Figure 2: (26)] including a first filter corresponding to the first color [Column 3, Lines 29-33], and the second portion [Figure 2: (28, 30)] including a second filter [Figure 2: (30)] correspond to the second color [Column 3, Lines 53-56].
10. Claims 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone (U.S. Patent 4012632).
11. With regards to Claim 9, Stone discloses an illumination/input device including:
- A first light source [Figure 2: (24)] emitting a first light of a first color [Column 3, Lines 31-35];
 - A second light source [Figure 2: (32)] emitting a second light of a second color [Column 3, Lines 53-58];
 - A cap [Figure 2: (16)] having a first portion [Figure 2: (26)] and a second portion [Figure 2: (28, 30)], the first portion displaying brightness by the first light, the second portion displaying brightness by the second light; and

- A control module [Figure 3; Column 4, Lines 16-28] controlling the first light source and the second light source;
- Wherein the illumination/input device is in a first state, the control module controls the first light source to emit the first light to brighten the first portion, and as the illumination/input device is in a second state, the control module controls the second light source to emit the second light to brighten the second portion [Column 3, Lines 63-68].

12. With regards to Claim 10, Stone discloses the first portion [Figure 2: (26)] including a first filter corresponding to the first color [Column 3, Lines 29-33], and the second portion [Figure 2: (28, 30)] including a second filter [Figure 2: (30)] correspond to the second color [Column 3, Lines 53-56].

13. Claims 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone (U.S. Patent 4012632).

14. With regards to Claim 13, Stone discloses an illumination/input device including:
- A first light source [Figure 2: (24)] emitting a first light of a first color [Column 3, Lines 31-35];
 - A second light source [Figure 2: (32)] emitting a second light of a second color [Column 3, Lines 53-58];
 - A first portion [Figure 2: (26)] and a second portion [Figure 2: (28, 30)], the first portion displaying brightness by the first light, the second portion displaying brightness by the second light; and

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- A control module [Figure 3; Column 4, Lines 16-28] controlling the first light source and the second light source;
- Wherein the illumination/input device is in a first state, the control module controls the first light source to emit the first light to brighten the first portion, and as the illumination/input device is in a second state, the control module controls the second light source to emit the second light to brighten the second portion [Column 3, Lines 63-68].

15. With regards to Claim 14, Stone discloses the first portion [Figure 2: (26)] including a first filter corresponding to the first color [Column 3, Lines 29-33], and the second portion [Figure 2: (28, 30)] including a second filter [Figure 2: (30)] correspond to the second color [Column 3, Lines 53-56].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone (U.S. Patent 4012632) as applied to Claim 1 above, and further in view of Suzuki et al. (U.S. Patent 5949346).

17. With regards to Claim 3, Stone discloses the claimed invention as cited above, but does not specifically teach the first and second portions including a first and second fluorescence corresponding to the first and second colors, respectively.

Suzuki teaches, "In addition, the LED array may be composed of ultraviolet LEDs, while the engraved portions are coated with a paint that is colored by the ultraviolet rays, e.g., fluorescent paint [Column 42, Lines 15-18]."

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify the illumination/input device of Stone to incorporate the fluorescent material of Suzuki to the first and second portions in order to provide an aesthetic appeal and desired optical effect with respect to illumination. Such fluorescence is commonly known within the art.

18. With regards to Claim 4, Stone in view of Suzuki discloses the claimed invention as cited above. In addition, Suzuki teaches, "Particularly, the LED array 310A may use an LED that has LED chips, that are able to emit light in red, green and blue colors, respectively, packed in one element [Column 42, Lines 9-11]."

19. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone (U.S. Patent 4012632) as applied to Claim 5 above, and further in view of Suzuki et al. (U.S. Patent 5949346).

20. With regards to Claim 7, Stone discloses the claimed invention as cited above, but does not specifically teach the first and second portions including a first and second fluorescence corresponding to the first and second colors, respectively.

Suzuki teaches, "In addition, the LED array may be composed of ultraviolet LEDs, while the engraved portions are coated with a paint that is colored by the ultraviolet rays, e.g., fluorescent paint [Column 42, Lines 15-18]."

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify the illumination/input device of Stone to incorporate the fluorescent material of Suzuki to the first and second portions in order to provide an aesthetic appeal and desired optical effect with respect to illumination. Such fluorescence is commonly known within the art.

21. With regards to Claim 8, Stone in view of Suzuki discloses the claimed invention as cited above. In addition, Suzuki teaches, "Particularly, the LED array 310A may use an LED that has LED chips, that are able to emit light in red, green and blue colors, respectively, packed in one element [Column 42, Lines 9-11]."

22. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone (U.S. Patent 4012632) as applied to Claim 9 above, and further in view of Suzuki et al. (U.S. Patent 5949346).

23. With regards to Claim 11, Stone discloses the claimed invention as cited above, but does not specifically teach the first and second portions including a first and second fluorescence corresponding to the first and second colors, respectively.

Suzuki teaches, "In addition, the LED array may be composed of ultraviolet LEDs, while the engraved portions are coated with a paint that is colored by the ultraviolet rays, e.g., fluorescent paint [Column 42, Lines 15-18]."

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify the illumination/input device of Stone to incorporate the fluorescent material of Suzuki to the first and second portions in order to provide an

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aesthetic appeal and desired optical effect with respect to illumination. Such fluorescence is commonly known within the art.

24. With regards to Claim 12, Stone in view of Suzuki discloses the claimed invention as cited above. In addition, Suzuki teaches, "Particularly, the LED array 310A may use an LED that has LED chips, that are able to emit light in red, green and blue colors, respectively, packed in one element [Column 42, Lines 9-11]."

25. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone (U.S. Patent 4012632) as applied to Claim 13 above, and further in view of Suzuki et al. (U.S. Patent 5949346).

26. With regards to Claim 15, Stone discloses the claimed invention as cited above, but does not specifically teach the first and second portions including a first and second fluorescence corresponding to the first and second colors, respectively.

Suzuki teaches, "In addition, the LED array may be composed of ultraviolet LEDs, while the engraved portions are coated with a paint that is colored by the ultraviolet rays, e.g., fluorescent paint [Column 42, Lines 15-18]."

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify the illumination/input device of Stone to incorporate the fluorescent material of Suzuki to the first and second portions in order to provide an aesthetic appeal and desired optical effect with respect to illumination. Such fluorescence is commonly known within the art.

27. With regards to Claim 16, Stone in view of Suzuki discloses the claimed invention as cited above. In addition, Suzuki teaches, "Particularly, the LED array 310A may use

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an LED that has LED chips, that are able to emit light in red, green and blue colors, respectively, packed in one element [Column 42, Lines 9-11].”

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art pertinent to the current application, but are not considered exhaustive:

US Patent 4947291 to McDermott;

US Patent 5063379 to Fabry et al;

US Patent 5695269 to Lippmann et al;

US Patent 5743616 to Giuliano et al;

US Patent 6302551 to Matumoto;

US Patent 6419372 to Shaw et al;

US Patent 6761462 to Yoshida;

US Patent 6786617 to Lemay et al;

US Patent 6830366 to Irie;

US Patent 6860612 to Chiang et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (3/21/2005)


Stephen Husar
Primary Examiner